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# A model to rehabilitate a fossilized pronunciation error of Turkish English language teachers: the nasal devoicing of /ŋ/ as /ŋk/

**Mehmet Demirezen\****Hacettepe University Faculty of Education, Ankara, 06532, Turkey*

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## Abstract

The Nonnative learners sharing the same L1 naturally converge toward L2 pronunciation heavily by the intrusion of L1, creating the fossilized articulation errors. It must be noted that fossilized pronunciation errors of segmental nature inevitably exert disproportionate impacts on the communicative competence by impairing the intelligibility, accuracy, and fluency of the nonnative learners. This negative L1 segmental intrusion is inescapable because the L1 phonemic inventory exerts mental blocks on the learners' articulation skills if L1 and L2 do not share the same language typology. This presentation will prove that the difficulty of the /ŋ/ nasal phoneme to Turks is such a case. In this study, it has been indicated that the audio-articulation model is a practical and workable method, and that novice teachers and students are capable of modifying their fossilized pronunciation errors and can bring them closer to the target language norms if they practice with the pronunciation correction model called the *audio-articulation model*.

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**Keywords:** Pronunciation; fossilization; eng (velar nasal); pronunciation rehabilitation.

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## 1. Introduction

Turkish English language teachers have a general affinity to mispronounce the /ng/ sound combination as /Ink/ form, but not in an /Inj/, which is the right case. This is a very common pronunciation error whose rate of occurrence is 57 % in Turkish English language teachers (Demirezen, 2007:125 ). The result of the pronunciation is a bad sounding articulation that does not suit the professional career of a foreign language teacher. It must be borne in mind that bad pronunciation impedes and obscures intelligibility, accuracy, fluency, and automatic control of pronunciation in the target language. The fossilized pronunciation mistakes keep bothering the communicative fluency of the teacher trainees and novice foreign language teachers who are on the job. Since teaching foreign languages is a vocational job, developing a good intelligible pronunciation is an integral part of the profession.

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\* Mehmet Demirezen. Tel.: +90-506-555-18-63; fax: +90-312-297-6119.

E-mail address: [md49@hacettepe.edu.tr](mailto:md49@hacettepe.edu.tr)

## 2. The Required Professional Attitude

Appropriate pronunciation is a self-investment in the teachers' phonological development. Non-native teacher trainees of the English language need to listen to a series of micro-listening sub-skills and macro-listening activities and do practice on the fossilized pronunciation mistakes to promote their conversational skills in communicative fluency in and outside of the classroom, but there is not a suitable method that provides them with these activities by taking into consideration the interactional dynamics and classroom climate, appropriate feedback and reward systems. That is why, an advanced level pronunciation teaching method, called the audio-articulation method (Demirezen, 2003b), is created. This lies at the heart of modern communicative and learner-centered pronunciation teaching methodology.

## 3. The Phonetic Structure of the English Nasal Phonemes

In English there are three nasal phonemes, namely /m, n, N/. Since there are /n/ and /m/ phonemes in the Turkish consonant inventory, the English /n, m/ phonemes cause no pronunciation problems to the Turkish students of the English language. But the /N/ phoneme, which is a voiced velar nasal, and which does not exist as an independent phoneme in modern standard Turkish, causes a nagging pronunciation problem for Turkish teacher trainees, who tend to articulate this phoneme in a form of [Nk] word-initially and especially word-finally. The following data represent the phonetic distribution of the English /N/ phoneme:

<u>Word-medial</u>	<u>Word-final</u>	Word-Medial and Word-final
singer [σINg↔p]	sing [σIN]	singing [σINγIN]
longed [l N g↔δ]	long [l N]	longing [l NγIN]
bringing [βpINγζ]	bring [βpIN]	bringing [βpINγIN]

Because there is no word-final voiced consonant in Turkish, they tend to devoice the word-final positioning of the [N] phoneme as [Nk], through a word-final devoicing. The result is a terrible sounding speech. The following data demonstrate this problem:

<u>Expected articulation</u>	<u>Fossilized Pronunciation of Turkish Teachers</u>
sing [σIN]	sing [σINκ]
sting [στIN]	sting [στINκ]
bring [βPIN]	bring [βPINκ]
wing [ωIN]	wing [ωINκ]

Obviously, this is a typical case of mother tongue interference, created through a neutralization process of word-final English [N] phoneme as [Nk] in the articulations of the Turkish learners of the English language. Thus, the word-final /ng/ consonant cluster is converted into a case into [Nk], which highly bothers the acoustic understanding and the beauty of this English phoneme. The incorrect articulations of such words get to be highly bothering articulations for the native speakers of English.

## 4. Method: the Application of the Audio-articulation Model

There is no specific method that handles a fossilized pronunciation errors for 45 to 50 minutes in foreign language teaching. The *audio-lingual model* stresses the teaching of the pronunciation of the vocabulary items correctly. The *social learning method* also attaches some importance to the teaching of some sounds. The *audio-articulation* method (Demirezen 2003a, 2004b) attempts to cure the fossilized pronunciation mistakes of the teacher trainees and the teachers on-the-job.

#### 4.1. Basic steps in applying the audio-articulation method (Demirezen 2003a, 2004b)

#### 4.2. A Model lesson plan

Level: In-service-training or teacher training

Method: The audio-articulation Model

Duration: one class period (45-50 minutes)

##### 4.2.1. Motivation-warm up

**Teacher: Good morning student! How are you all today?**

**Students: (In choir) Good morning. Thank you we are fine. What about you?**

##### 4.2.2. Reviewing the previous material related to the topic.

**The TT:** The previously taught phoneme is the /n/ phoneme, which is the first element of the minimal pair /n/ and /N/. Students, as you know, we hear the / n / phoneme in such words as *night, name, pin, pen, honey, sunny, evening* and *none*. Today, we will learn an English phoneme that is very close to it as a pair.

##### 4.2.3. Giving the full definition of the day's topic.

**TT:** Students, today we will study on the articulation of the /N/ phoneme, which is a *voiced alveolar-dental nasal*, as seen in *evening* [ IɔvIN ], *morning* [ μ pvIN ], *king* [ κIN ], *building* [βIλδIN], *holding* [η λδIN ], etc. (Teacher trainer writes the new topic on the board.)

##### 4.2.4. Starting to teach the new topic:

**TT:** Students, the following indicates the difference between /n/ and /N/ phonemes:

**/ n / a voiced dental / alveolar nasal**

**/N/ a voiced velar nasal**

#### A. Preparing a Corpus: /n/ and /N/

The TT prepares a corpus of 50 to 80 words that contain the /n/ and /N/ contrasts from which he develops the oncoming exercises ( Longman Dictionary of American English, 2004)

sin [σIN]	ton [tɔn]	sing [σIN]	wing [wIN]	Hong Kong [h N k N ]
kin [kIN]	pin [pIN]	king [σIN]	tongue [τɔN]	during [djurIN]
ban [βθv]	king [kIN]	bang [βθN]	ping [σIN]	nothing [nɔTIN]
pan [pθv]	thin [TIN]	pang [pθN]	dung [dɔN]	ping pong [pIN p N ]
son [sɔv]	pain [peIv]	sung [sɔN]	hang [hθN]	interesting [InterestIN]
win [wIN]	been [bi:n]	being [bi:N]	paying [peIN]	King Kong [kIN k N ]
nap [nθp]	none [nɔv]	long [l N ]	song [s N ]	bowling [bouIN]
ton [τɔv]	neck [nek]	spring [spPIN]	bring [βPIN]	anything [enITIN]
lung [lɔN]	gong [g N ]	swing [swIN]	thing [TIN]	wrong [wr N ]
gang [gθN]	sting [stIN]	ring [PIN]	seeing [si:N]	think [TINK]
not [nɔt]	nanny [nθni]	along [↔l N ]	belong[b↔l N ]	bowling [bouIN]
evening [IvnIN]	young[jɔN]	strong[str N ]	morning[m rnIN]	everything[evrITIN]
something[sɔmTIN]	mourning[mournIN]	nothing[nɔTIN]		

**(TT gets these words to be repeated in single and choir articulations.)**

#### B. Specifying the minimal pairs

TT singles out some minimal pairs to show the accurate comprehension of the fossilized mistake causing phoneme; without phoneme discrimination skills, learners can neither express themselves nor understand others

fully: <b>/ n /</b>	<b>/ N /</b>	<b>/ n /</b>	<b>/ N /</b>
sin [σIv]	sing [ σIN ]	pan [πθv]	pang [πθN]
kin [κIv]	king [κIN]	ton [τɔv]	tongue [τɔN]
ban [βθv]	bang [βθN]	thin [TIv]	thing [TIN]

The teacher practices the above given minimal pairs through exhortation, without boring the students, in single or choir repetitions. Teacher is, here, a pronunciation coach, giving appropriate models where necessary, setting and providing a wide variety of practice opportunities, at the same time giving an overall support by encouraging the learners.

C. TT produces the following tongue twisters taken from the general corpus, and s/he practices them in class by calling on students in single or choir activities. Such practices sensitive the learners to their own potential as active pronouncers of the target language.

(i)	(ii)
A king	A ton
A young king	A ton of tongues
A singing young king	A ton of punning tongues
A singing strong young king	A ton of long punning tongues
(iii)	(iv)
A duckling	A fang
A singing duckling	A fang of a fan
A singing young duckling	A fang of a strong fan
A singing young swinging duckling	A fang of a young strong fan
(v)	(vi)
A song	A thing
A long song	A thin thing
A long mourning song	A long thin thing
A long mourning song in the morning	A long thin stinging thing

4.2.5. *Giving the RULE. S/he uses the audio-devices if necessary.*

TT: Students, may I draw your attention? This is RULE TIME.

Here is the rule: As I have stressed before,

/ n / a voiced dental / alveolar nasal, as in bin, tin, sin and fan.

/ N / a voiced velar nasal, as in bring, sing, king and fang.

In the articulation of / n /, the apex touches the dental / alveolar area of the upper teeth ridge and at that moment the air stream directly coming from the lungs is modified in the mouth as heard in such words as pan [πΘv] and ban [βΘv], whereas in the articulation of the /N/, the dorsum of the tongue is raised up to the velum, blocking the way of the air stream which escapes into the nasal cavity where the articulation takes place in form of [NNNNNN] sound as heard in pang [πΘN] and bang [βΘN]. This case is clearly seen in the following figures demonstrating the places of articulations of /n/ and / N /

/ n /

/ N /



**CAUTION:** Many of the non-native English language teachers do not pay attention to the difference between /n/ and /N / and carelessly mispronounce such correct pronunciations long [λ N ], slang [σλΘN], young [φϕN], bringing [βρINγIN ], eating [ι:τIN], sleeping [σλι:πIN], going [γωIN], and evening [IϑvIN] as [λ N k], [σλΘNk], [φϕNk], [βρINγIN], [ι:τINk], [σλι:πINk ], [ γωINk], and evening [IϑvINk]. This is a grave fossilized pronunciation mistake.

/N/ is articulated as [Nk] only and only when / k / phoneme follows / N /, as distinctly heard in the following words:

monk[m Nk ]

strink [στρINk ]

strunk [στρϕNk]

strunk [στρϕNk]

drink [δpINκ]	drank [δpΘNκ]	drunk[δpøNκ]
brink [βPINκ]	wink [ωINκ]	stink [στINκ]
frank [φpΘNκ]	blank [βλΘNκ]	chunk [τΣøNκ]

#### 4.2.6. Producing further drills as reinforcing power

##### A. Practicing with the minimal sentences

TT: Students, repeat the following sentences by paying close attention to /n/ and /N/ difference in the articulations.

1. King Kong is my KIN / KING.
2. Vampire's FANS /FANGS can be STINKY/STINGY.
3. My KING / KIN has no WINS / WINGS.
4. This PAIN / PAYING doesn't bring you any gain.
5. A CLAN / CLANG will scare the whole GANG.
6. A PIN / PING will not suffice.
7. This is a slight PAIN / PAYING.
8. His KIN / KING is ruling in the morning and evening.

**B. Practicing with sentences called contextual clues:** such practices make the place, point and manner of articulation of the problem-causing fossilized mistake better heard, recognized, and articulated.

1. England's KING is my KIN.
2. To be a KING is not a SIN.
3. This BAN does not bring a financial BANG.
4. This long THING is THICK and THIN.
5. BRING me a SWING is the EVENING.
6. SEEING does not mean SEEN.
7. My SON has just SUNG a LONG SONG.
8. A flagpole is a THIN THING.
9. A BEAN does not mean a BEING.
10. Ben has a FAN with a funny FANG.

#### 4.2.7. Making a Summary

TT makes a summary by going over the already given rule in figure (1) and draws the students' attention to the fossilization causing problem sound of the target language.

#### 4.2.8. Giving homework

TT: Students, each of you will prepare the following exercises on the following items; please turn them in the next lesson.

## 5. Conclusion

The scarcity of the pronunciation teaching methods, lasting one class hour to cure the fossilized pronunciation mistakes of the teacher trainees and teachers-on-the-job, is a big problem. The fossilized pronunciation problems of the non-native speaking teachers can no longer be ignored because pronunciation teaching cannot be marginalized in foreign language teacher education. Fossilized pronunciations (Acton 1991) can be rehabilitated. Since good pronunciation, which paves the way for good intonation, is an integral part of the communicative competence, the audio-articulation pronunciation teaching method may be of great use in handling this problem. There is no other better way to cure the incorrect articulations than pedagogically designed adequate repetitions of the problem-causing phoneme in communicative contexts within a combination of micro-skill and macro-skill articulation activities. Repetitions should not be overused; otherwise, they bore the students and harm the creative use of language and become an obstacle in developing the communicative fluency.

Turkish learners of the English language cannot properly articulate the nasal /N/ phoneme of the English language because of the interference of Turkish consonant rule, which allows no word-final voiced consonants. For this reason, the Turkish teacher trainees tend to pronounce it as [Nk], especially in word-final positions, and the result is a very strange sounding articulation in speech, harming the acoustic beauty and perception of this English phoneme.

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